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June 24, 2011

VIA EMAIL ONLY

Michelle Kerr
US EPA Region 5 Superfund Division
Remedial Project Manager
77 W. Jackson Blvd. SRF 6J
Chicago, IL 60604

Re: Comments on Draft Fourth Five-Year Review
Reilly Tar & Chemical Corporation Superfund Site

Dear Michelle:

Thank you for the opportunity to comment upon the draft June 2001 Five-Year Review Report for the Reilly Tar and Chemical Corporation, St. Louis Park Superfund Site. Our comments are below.

Prarire du Chien-Jordan Aquifer, Edina Well E13. In pages 37-38 of the draft report, the agencies address trending of total other PAH compounds in Edina well E13.

As you know, following the Third Five-Year Review, the City of St. Louis Park submitted a work plan in 2008 to evaluate the efficacy of the current Praire du Chien-Jordan Aquifer ("PCJ") gradient control regime. Implementation of the work plan continues and it is unfitting to speculate on the possible need for alteration of the control system or treatment of E13 until such time that the work plan data is collected, validated and subject to analysis. Speculation suggests potential unscientific bias and should be avoided.

We would therefore suggest that, other than a most general discussion of trends and ongoing gradient control assessment for the PCJ, specific discussion of E13 be deleted.

If not deleted, it is important that the report observe that since the September 2006 Five-Year Report, total other PAH compound concentrations in E13 have stabilized or may even indicate a decreasing trend.

It is also improper to use a polynomial projection (apparently 2nd order) when trending future concentrations as set forth in Figure 6 of the draft. According to the US EPA's 1989 document entitled *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities -Interim Final Guidance,* chemical data for groundwater tend to follow a log-normal distribution. Therefore polynomial analysis typically is not used to analyze concentration versus time data. Rather, a log-normal trend analysis should have been used to evaluate the groundwater concentration versus time data for the E13 in accordance with US EPA guidance. This has been done in the figure attached hereto.

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As evident from examination of the polynomial trend analysis performed and presented by the US EPA as Figure 6 of the 5-year review letter, the projected polynomial trend line diverges substantially from the actual concentration. The US EPA analysis, therefore, predicts an impending 5-year exceedence of the action level. Based upon our analysis, the concentration data collected from E13 since September 2006 indicates a stabilized or maybe even a slightly decreasing trend but certainly no impending exceedence of the action level as suggested by the US EPA.

Using the entire data set as of April 1988, a log-normal analysis indicates that if concentrations were to reach the action level, it will not occur until at least the year 2029. If we examine only the data since September 2006, which shows a stabilized or maybe even a slightly decreasing trend, a potential action level exceedence would occur much later or never.

It is also incorrect to state that carbon treatment on E13 "well may be soon be necessary to protect human health," not only because of the incorrect trend projection, but also because the 280 ng/l drinking water criterion identified in the CD-RAP has been overtaken by "more recent information with regard to PAH toxicity," as reported on page 42 of the draft. As noted on Table 5 of the draft report, the Minnesota Department of Health has established a Health Risk Limit for Other PAHs of 300,000 ng/l. While of continued relevance to the CD-RAP, the 280 ng/l criterion for Other PAHs should no longer be deemed relevant as an expression of risk to human health.[1]

Discussion of Previous Recommendation #1. Pages 31-32 of the draft address the recommendation in the last 5-year report to evaluate gradient control of the PCJ. As is set forth at the bottom of page 32, the City is implementing an approved work plan to assess gradient control. Until such work is completed, it is improper and possibly indicative of unscientific bias to state on page 32 that "the Agencies expect that up to three additional monitoring wells in the [PCJ] may be necessary ...." We request that the language concerning potential additional monitoring wells be deleted.

Historic Subsurface Investigation and Institutional Controls.

Page 40 of the draft states that "[t]he remedial action regarding subsurface investigation in the vicinity of the Site has been partly completed; a 1988 study south of the Site reported no significant soil impacts in the area defined in the CD-RAP." Elsewhere on page 25 of the draft, the report states that "[a] soil investigation conducted in September 1988 found no significant soil impacts in the area defined in the CD-RAP and south of the Site. However, the qualitative findings of that era are undergoing re-evaluation by EPA in terms of future land use restrictions at and near the Site."

Setting aside the completeness of institutional control, we are aware of no failure to fully implement the soils investigation required under the CD-RAP or of the qualitative deficiency of any data collected, reported and accepted by the agencies. To avoid the drawing of improper inferences, we would request that these statements be deleted.

[1] The same is true with respect to the criterion established for carcinogenic PAHs in the CD-RAP.

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With respect to the continued need for parties required under the CD-RAP to implement specified institutional controls, we concur. We understand that EPA's views on institutional control have evolved since the 1986 Consent Decree and look forward to further discussion on this topic.

Very truly yours,

Thomas E. Mesevage

Attachment

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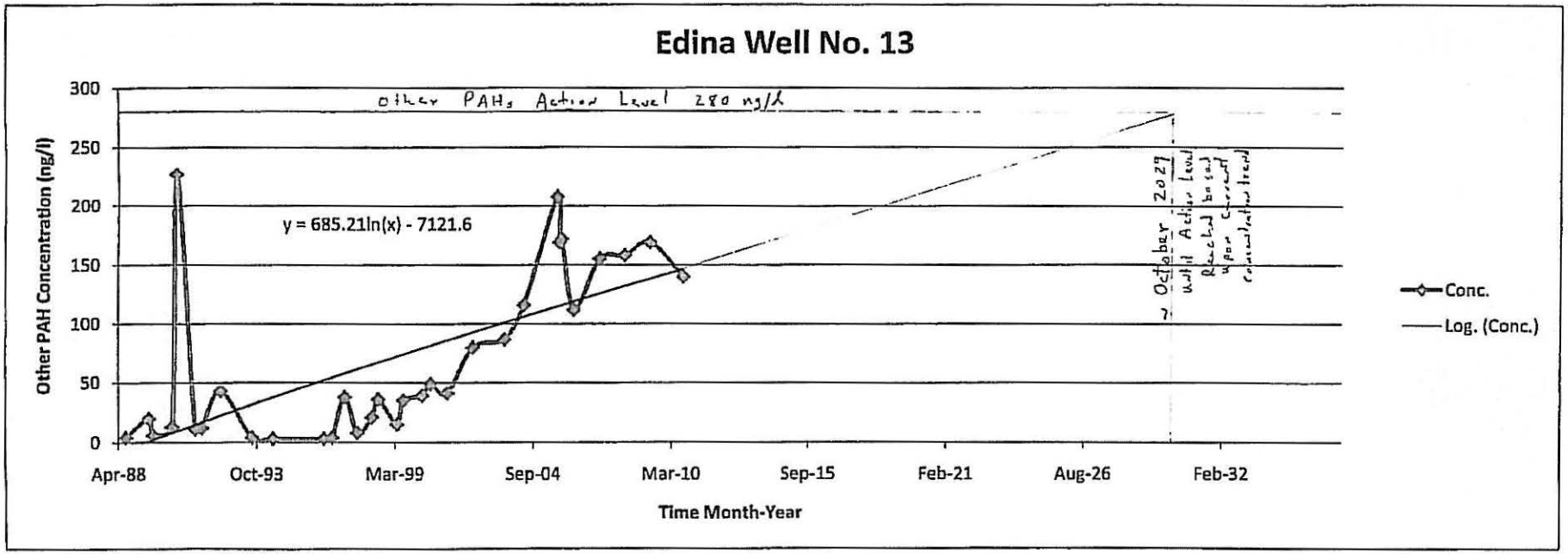
Edina Well No. 13
other PAHs Action Level 280 ng/l
y = 685.21ln(x) - 7121.6
Other PAH Concentration (ng/l)
300
250
200
150
100
50
0
Apr-88
Oct-93
Mar-99
Sep-04
Mar-10
Sep-15
Feb-21
Aug-26
Feb-32
Time Month-Year
Conc.
Log. (Conc.)